



JAMES R. MORRIS, VICE PRESIDENT

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May 28, 2009

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Subject: Duke Energy Carolinas, LLC (Duke)  
Catawba Nuclear Station, Unit 2  
Docket Number 50-414  
Reply to Request for Additional  
Information Concerning Steam Generator  
Tube Inspection Reports for End of Cycle  
15 Refueling Outage (TAC Number MD8402)

References: 1. Memorandum from Allen L. Hiser, Jr. to Melanie  
Wong, dated June 6, 2008 (communicated to Duke  
via electronic mail dated August 4, 2008)  
2. Letter from Duke to NRC, same subject, dated  
December 18, 2008

Reference 2 provided Duke's response to the Reference 1  
Request for Additional Information (RAI). In Reference 2,  
Duke indicated that Question 4 would require a supplemental  
response. Accordingly, please find attached our supplemental  
response to this question.

If you have any questions concerning this material, please  
call L.J. Rudy at (803) 701-3084.

Very truly yours,

James R. Morris

LJR/s

Attachment

A001  
NRR

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xc (with attachment):

L.A. Reyes, Regional Administrator  
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A.T. Sabisch, Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
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J.H. Thompson, Project Manager (addressee only)  
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bxc (with attachment):

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L.J. Rudy  
P.W. Downing, Jr.  
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C.B. Cauthen  
W.K. Davis  
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RGC File  
Document Control File 801.01  
ELL-EC050  
NCMPA-1  
NCEMC  
PMPA

ATTACHMENT

REPLY TO NRC REQUEST FOR ADDITIONAL INFORMATION

REQUEST FOR ADDITIONAL INFORMATION  
CATAWBA, UNIT 2  
2007 STEAM GENERATOR TUBE INSPECTIONS  
TAC No. MD8402  
DOCKET No. 50-414

4. Please discuss the extent of tube support plate hole blockage. In addition, discuss the results of the rotating probe examinations performed at 08H and 09C for evidence of hole blockage.

**Duke Response:**

The visual inspection previously performed during the Catawba Unit 2 End of Cycle (EOC) 15 refueling outage was inconclusive because the inspection could not see the bottom of the support plate broached holes. A more comprehensive visual inspection of the uppermost tube support plate and broached holes was performed during the EOC 16 outage in March 2009. This inspection was performed by pushing a video probe with a 90-degree adapter down the tube free lane and looking down tube columns on the hot and cold leg sides. The 90-degree adapter provided a good view of the broached openings, including a view down into the broach. Nine columns were inspected on each side of the steam generator. It is estimated that approximately 10% of the broached openings were inspected on both the hot and cold leg sides.

Based on the visual inspection performed during the EOC 16 outage, the broached openings at the 08H and 09C support plate were found to be generally open (i.e., non-occluded). There was no evidence of broach blockage observed from deposit build-up or so-called "coronary artery disease". There was some evidence of deposit lips beginning to form at the bottom of broached openings. Also, a small number of openings were observed to be partially blocked by "spalled" flakes.

Evaluation of the array data from the EOC 15 outage was indeterminate with regard to the extent of blockage at the 08H and 09C support locations. Based on the comprehensive visual inspection performed at these locations during the EOC 16 outage, no further work is planned to evaluate array probe data from these locations.